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ABSTRACT

The trends in post-industrial society toward decentralization, diversity, and individualization, with emphasis on synthesis rather than analysis, require educators who are more flexible, adaptable, and capable of managing diversity; this can prove advantageous to small and rural schools, which have long been using such a philosophy. Educators will become expert in managing information resources and designing learning experiences for individual students relevant to their needs, growth, and development. Optimal learning centers (schools) will serve 800-1,200 pupils, make maximum use of modern technology for information transfer, require fewer teachers with higher qualifications, and make extensive use of paraprofessionals and community resources. Educational services centers, like New York's Boards of Cooperative Educational Services, will provide shop-oriented occupational education; education for the severely handicapped; service technicians to repair electronic equipment; specialists in developing and adapting software; inservice teacher education; subject matter specialists; libraries of computer and video software; and mainframe computers, transmitters, and receivers too expensive for purchase by school districts. Rural school districts must act aggressively to create the necessary infrastructures for inter-district cooperation, integrate high technology into rural school organizational structures, and provide leadership in operationalizing schooling models appropriate for the post-industrial era. (MH)

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INTER-DISTRICT COOPERATION AMONG RURAL SCHOOLS IN A POST-INDUSTRIAL SOCIETY

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INTER-DISTRICT COOPERATION AMONG RURAL SCHOOLS IN A POST-INDUSTRIAL SOCIETY

Austin D. Swanson

Welcome to the post-industrial society!

This may seem to be a strange way to introduce the topic listed in the program of facilitating inter-district cooperation in rural areas; but the rapidly changing patterns which are daily confronting us of thinking, living, working, communicating and even of having fun have enormous relevance to the subject. My approach to the issue before us will be to:

- outline the strong social, economic, political and technical trends which are clearly evident today;
- draw implications from those trends for schools;
- address the issue of inter-district cooperation in light of emerging needs;
- appraise the ability of our three level governance structure in education (school district, BOCES and State Education Department) to cope with rapidly changing schooling needs.

The post-industrial society. The industrial revolution resulted from mankind's learning to enhance muscle power by converting the energy in fossil fuels through machinery. In integrating the machine into an agrarian society, that society was transformed as the term "industrial revolution" implies. To make most effective use of machines, a substantial degree of centralization was necessary resulting first in cities and then in metropolises/megapolises, in large factories and national

corporations, in mass production, mass media, mass markets, mass schools, mass culture and in big government.

Now, the computer and related paraphernalia are doing for the mind what the machine did for the muscle. In integrating the computer into an industrial society, that society is now being transformed.

John Naisbitt (1982) in his best-selling book Megatrends, has identified "ten new directions transforming our lives." In summary these trends are:

1. from an economy based on industrial production to one based on "the creation and distribution of information;"
2. from an impersonal technology to a personalized one ("high tech/high touch");
3. from a national economy to a world economy;
4. from a society run by short-term considerations and rewards to one dealing with much longer time frames;
5. from centralization to decentralization;
6. from institutional help to self-help;
7. from representative democracy to participative democracy;
8. from hierarchical structures to informal networks;
9. from the industrial northeast to the south and west; and
10. from limited range of personal choices to virtually unlimited options.

In other words, the current trends are toward decentralization, diversity and individualization.

I suspect that many of you, an audience of rural educators,

are delighted, and perhaps even relieved, with such trends because the social, economic and political patterns and attitudes which are emerging have much more in common with traditional rural values and life styles than they do with those which have prevailed in urban areas for the past century. The 1980 census is a harbinger of things to come: for the first time in the history of the United States, rural areas were shown to have grown at a faster rate than had metropolitan areas.

The centralization of everything, including schools, was a function of industrialization. The mass school was a design for urban areas, and subsequently was forced on rural areas in the name of progress. There was a certain justification for this because so many sons and daughters of rural areas moved to the cities and they needed the training of the mass school to function effectively there.

The type of thinking of the industrial era that was most valued was analytical. Things, ideas and concepts had to be taken apart in order to learn their essence. We responded in education by dividing up the curriculum into rather arbitrary departments and programs. This process was very successful in producing the information rich society we are experiencing today; but we are finding that all of our social and ecological systems are interrelated while our experts are not. This fragmentation has led to the phenomenon of information overload because we have not developed thought processes for piecing knowledge together into integrated wholes, i.e. synthesis. Synthesis, according to Toffler

(1980), another futurologist and author of The Third Wave, will be the most valued thought process of the future. If the school is to encourage synthetic thinking, its entire curriculum will need to be revamped. Educators, themselves, must become more flexible, more adaptable and more capable of managing diversity.

Implications for the Schools. Since early in this century, industrial concepts of standardization and economy of scale have led to consolidating school districts so that a greater variety of course offerings would be available to students. But this same trend has rigidified the system so that it cannot adequately respond to the individual differences of students or to changing conditions in the environment. We have refused to recognize that learning is relatively independent of the actions of teachers, but rather a function of the interest, motivation and hard work of the student. We have assumed that learning cannot take place without the physical presence of a teacher supervising the learning process. The practical effect of this assumption has been to claim that in order for a child to learn, a course has to be established. More critically, that course requires a certified teacher, and cost considerations require approximately 20 or more persons per class. In a mass school, "individualization" requires many individuals. Under such assumptions, rural areas have obviously been at a disadvantage.

One might reasonably ask, if learning is so dependent on the student, why do we need teachers--or for that matter--schools?

Traditionally, teachers were needed because they were experts in the organization and transmission of knowledge. They had "learning," and if one wanted "learning" he found a teacher. Today, in an information rich society, the teacher as a source of information is rapidly becoming obsolete. Libraries, textbooks, television, video discs, computers and computer software and information retrieval systems provide the means whereby any student, once he learns how to read and to use these resources, can retrieve almost any information he needs. This portends new roles for educational professionals. They will become expert on managing information resources and in designing learning experiences for individual students relevant to their needs, growth and development. Teachers--if we continue to call them that--will be involved primarily in diagnosis of learning needs, prescription of learning experiences (i.e. curriculum design), motivation of students, and evaluation of the results. (Nelson, 1978, 129-130)

Over the past several years, I've been involved with two colleagues in designing prototype schooling models for a post-industrial society. The results are presented in the book Modernizing the Little Red Schoolhouse: The Economics of Improved Education (Willett, Swanson and Nelson, 1979) Notice that the illustration on the jacket of the book is of a one-room country school--and with good reason. The one-room school assumed

individualization of instruction; and, it assumed that learning was a continuous and integrated process. The school was characterized by non-gradedness, independent study and flexible scheduling. This is the school which was indidgenous to the United States and which perhaps best reflects the spirit of America. It's weakness was that a single teacher could not master all the knowledge being generated by a scientific society. Mass education was forced to sacrifice the Common-School concept of individualization in order to provide adequate staffing at affordable cost. In spite of a much larger number of students today and the infinitely larger store of knowledge, such learning is again technically possible through the proper use of modern educational technology in a multimedia universe (human and non-human).

Our design was not made specifically for rural schools. Rather we were seeking a design optimal for a post-industrial society. As rural educators, however, you will be interested that our optimal design provided for a "learning center" (we dropped the term "school") for children of traditional school age (5-17) ranging in size from 800-1200 pupils. I suspect that most of the districts you represent fall in that range.

We have tended to think of individualization and educational technology as being very expensive. It is within the context of the existing schooling structure. But when teachers, students, support persons and technology are integrated into a man-machine system of instruction, the costs become highly affordable. Even accounting for substantial increases in teacher salaries, the cost

per pupil would be well below that of the existing system. The reasons: there would be fewer teachers, but with higher qualifications; technology would largely take over the information transfer function; extensive use would be made of relatively low cost paraprofessionals under the supervision of teachers; and there would be extensive use of community resources.

Admittedly, this model marks quite a departure from the established pattern for organizing schooling--but we are not alone in making such proposals. I suspect that I find the model credible because of my work with rural educators in the early 1960's through the Central School Study and the Catskill Area Project. Rural educators have long espoused such organizational concepts even before today's sophisticated technology was available. Rural educators in the west have assembled some of their best practices through the Northwest Regional Educational Laboratory's publication Promising Practices (1971) series. Interestingly enough, the most prestigious of our private elementary and secondary schools are small.

A similar design to that of our Little Red Schoolhouse was proposed in 1970 for high schools of up to 250 students by a team of school administrators, educational consultants and architects (Leggett et al., 1970). They called their model "Smallway." As with ours, it was not designed specifically for rural schools but

was designed to be small because of the belief that small is better regardless of geography. The authors write of their model:

> At Smallway, the teacher must shift his approach and become a guide to learning, foregoing the satisfaction of transmitting knowledge. Under this model, a class of at least 20 students is not necessary to offer a given course efficiently. It also means that a huge base of students is unnecessary to provide the interested and gifted few with the most specialized course in sequence. By developing approaches with which students may learn at their own speed, advanced placement physics or calculus, for example, can be offered to one, two or ten kids (p. 46).

Smallway makes use of faculty generalists flanking a principal, a counselor and a librarian. In all, there would be 10 to 12 professional staff members. Instruction makes use of non-graded classes, independent study, flexible scheduling with uncommitted time, and community volunteers. They estimate the cost as being comparable to more traditional patterns of organization.

I do not see such concepts of school organization sweeping the country overnight, but I do expect them to be "typical" by the year 2000. The trends are clearly pointing in that direction and these trends certainly undercut the traditional arguments for consolidation of rural schools. They do not, however, undercut arguments supporting interdistrict cooperation although the nature of that cooperation may change.

Inter-district cooperation in light of emerging needs. As we move toward the type of schooling envisioned above, I see delivery of instruction remaining primarily within the province of the local district, except for shop-oriented occupational education

and education of the severely handicapped which will continue to be provided through BOCES. The need for shop-oriented occupational education at the secondary level, however, can be expected to decline sharply. Where instructors need to be shared, I see communication between instructor and student being accomplished through electronic means rather than transporting students or teachers physically.

I do see, however, BOCES becoming increasingly involved in providing the technical support services needed to permit a man-machine instructional system to function effectively. This might include: service technicians to keep the equipment in good repair; persons specialized in developing and adapting software; instructional resource centers containing computer and video software; and owning and operating some of the more expensive hardware such as mainframe computers, transmitters and receivers which could not be justified for purchase by school districts. To help teachers adjust to these new instructional systems and to assist them in keeping abreast of subsequent developments--which will be rapid--I see BOCES playing the central role in providing for in-service education. In rural areas, I see BOCES, supplemented by the State Education Department, providing a core of subject matter specialists with whom teachers may consult. I also see BOCES serving as the coordinator in integrating non-school community resources into the instructional process. BOCES can also be expected to become increasingly involved in providing support services for accounting, payroll, transportation,

food service and maintenance of buildings and grounds.

Ability of the educational governance structure to support change. We are entering a very dynamic period in education and our governance structure must be flexible enough to respond. In New York State, this structure has three service levels with authority for making policy presently concentrated at two of these levels. The primary level of authority is the state as represented by the legislature, the Governor, the Regents, the Commissioners, and the State Education Department. This level is charged with establishing basic policy for the system and overseeing and coordinating its components. The second level of authority is local school districts which have been described by the Regents as "the basic operating units" (New York State Regents, 1976, 13). The most recent school governance invention was BOCES in 1948 and its role is still a bit ambiguous.

If we view this as a network of educational resources available to highly diverse communities, it is perfectly reasonable for the state to delegate or decentralize those functions which can more effectively and more efficiently be handled at the regional or local level. By the same token, it is also reasonable for local districts to do cooperatively that which they cannot do well independently. The procedures for assigning functions should permit flexibility because an optimal allocation will vary among regions according to demographic and geographic characteristics and over time according to changing definitions of standards and new technological developments. The governance structure we now have is quite good, but I would suggest a few modifications designed to

enhance flexibility, coordination and supervision. The force of these recommendations is to complete the evolution of BOCES into an intermediate school district. These recommendations are among those originally made by a study I directed of regional services and school district organization for the New York State Education Department (Swanson, 1978).

1. BOCES should be granted the same authority to enter into contractual arrangements with other agencies as has been extended to school districts.
2. The BOCES educational services budget should be determined solely by contracts. Where state aid is not sought, there should be no limit placed upon the kinds of educational services offered by BOCES to component districts other than those which apply to school districts in general. Commissioner's approval should not be required for such contracts. Where state aid is sought, the State Education Department should have authority to approve programs for aid up to five years without annual review and BOCES aid should be made available on the basis of budgeted expenditures.

   I wish to underscore the importance of budget aid in contrast to reimbursement aid. As noted above, man-machine instructional systems in the long term are no more expensive--and probably less expensive--than the traditional instructional system. There are significant

start-up costs, however. Since most rural districts are poor, high start-up costs can impede the use of educational technology unless state aid is provided at the outset. Budget aid is a means of doing this.

3. All formal inter-district arrangements should be made through BOCES.

4. State Education Department supervisory activities should be formally attached to BOCES under the direction of the district superintendent. When such services encompass more than a single BOCES, the service should be formally attached to one BOCES and coordinated through a committee of the district superintendents (a Joint Management Team).

5. Planning will take on a new importance in this latest educational revolution and BOCES should play a key role in carrying it out. Designing new instructional systems is far more complex than designing school buildings. We would never plan for a new building without contracting the services of a qualified architect, yet we routinely plan instructional innovations without recourse to appropriate experts and with amateurish results. The recognition of the importance of planning--or contemplative management--is gaining among school districts; but if it is to be done expertly, BOCES provides the logical location for planning experts.

Planning is a highly technical process. Most

districts are not of sufficient size to justify a planning office; even if all were, at present there would not be sufficient numbers of appropriately trained persons to staff them. This suggests that if planning activities are to be conducted in other than a perfunctory fashion there needs to be a pool of planning and curricular specialists in each region from which local districts can draw the expertise they require. Further, to assure comprehensivesness, the responsibility for planning programs which tend to be shared even in part should be placed at the highest level delivering services.

In summary, we are in the throes of a dramatic social and economic revolution. The irony is that, although this revolution is a progeny of the industrial revolution, adjustment to it is going to be far more difficult for urban dwellers than for country dwellers. Indeed, the post-industrial era is a blessing in disguise for rural areas. You can have your cake and eat it too. According to Naisbitt, high tech has also spawned high touch. Rural America has always been a high touch society; now with high tech, it is also an "in-touch" society. Technological progress has removed the isolation of rural communities. Through the electronic media, Main Street, USA is as much in the mainstream as is Madison Avenue in New York or Pennsylvania Avenue in Washington. You can

maintain the integrity of your communities while you remain in touch with the rest of the world.

High technology can enable you to preserve all that is of value in the community school without sacrificing the quality of your children's education; but there will still be an urgent need for inter-district cooperation. In the past this cooperation has been characterized by transporting people to central places such as BOCES centers where information and training were provided; increasingly this cooperation will be characterized by transmitting information from central places to the places where the people are.

To assure this for your children, you must act aggressively to create the necessary infrastructures. Perhaps because of the overwhelming dominance of urban populations in New York State, the State lags sadly in its education communication networks over western states where populations are rural and sparse. Rural people understand the spirit and concept of individualization which characterized the little red schoolhouse. Urban areas don't. They are still dominated by the "bigger is better" syndrome. By integrating high technology into your rural school organizational structures, you are in a position to provide badly needed leadership in operationalizing schooling models appropriate for the post-industrial era.

Small CAN be beautiful!!!

REFERENCE NOTES

Leggett, Stanton, Shapiro, Arthur, Cohodes, Aaron, and Brubaker, C. W., "The Case for a Small High School." Nation's Schools, 1970, 86.

Naisbitt, John. Megatrends: Ten New Directions Transforming Our Lives. New York: Warner Books, 1982.

Nelson, Eugene A. Occupational Education in New York State: The Transition from Vocational to Career Education (Occasional Paper #28). Albany, NY: Unpublished Monograph, State Education Department, New York State School Finance Law Study Project, April 1978.

New York State Regents. Educational Services: Structure, Governance, and Organization (Elementary, Secondary and, Continuing Education), (Position Paper No. 25). Albany, NY: The State Education Department, May 1976.

Northwest Regional Educational Laboratory. Promising Practices in Small High Schools. Portland, OR: Monograph, 1971.

Swanson, Austin D., King, Richard A., Nelson, Eugene A., and Good, Patricia C. A Study of Regional Services and School District Organization in New York State. Albany, NY: Unpublished Monograph, State Education Department, New York State School Finance Law Study Project, March 1978.

Toffler, Alvin. The Third Wave. New York: William Morrow, 1980.

Willett, Edward J., Swanson, Austin D. and Nelson, Eugene A. Modernizing the Little Red Schoolhouse: The Economics of Improved Schooling. Englewood Cliffs, NJ: Educational Technology Publications, 1979.